

## WHAT IS CLAIMED IS:

- subair* →
1. A semiconductor substrate device, comprising:
    - a first semiconductor substrate including a concave-convex surface; and
    - a second semiconductor substrate having an insulating film on a surface thereof,wherein the first semiconductor substrate and the second semiconductor substrate are brought together so that the surface of the first semiconductor substrate and the insulating film provided on the surface of the second semiconductor substrate contact each other to form a cavity in the semiconductor substrate device.
  2. A semiconductor substrate device according to claim 1, wherein the concave-convex surface of the first semiconductor substrate is defined by a plurality of convex portions formed at equal intervals.
  3. A method for fabricating a semiconductor substrate device, comprising the steps of:
    - providing a resist layer having a predetermined pattern on a first insulating film on a first semiconductor substrate;

performing isotropic or anisotropic etching of the first insulating film by using the resist layer as a mask, and performing anisotropic etching of the first semiconductor substrate by using the resist layer as a mask to form a concave-convex portion in a surface of the first semiconductor substrate to provide the first semiconductor substrate with the concave-convex surface; and

removing the resist layer and the first insulating film, and then bringing the first semiconductor substrate and a second semiconductor substrate together so that the surface of the first semiconductor substrate and a second insulating film provided on a surface of the second semiconductor substrate contact each other.

4. A method according to claim 3, further comprising the step of thinning the second semiconductor substrate from a surface opposite to the surface thereof provided with the second insulating film after the step of bringing the first semiconductor substrate and the second semiconductor substrate together.

5. A method according to claim 3, wherein the anisotropic etching of the first semiconductor substrate is performed

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Year	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	